HE - Helproutine

Parameter	Possible Values	Default Value	Applicable Statements
HE	see below	none	INPUT

With this session parameter, you specify the name of a helproutine which is to be assigned to a field.

Helproutines can be created with the Natural program editor, help maps with the Natural map editor.

The helproutine may then be invoked during processing of an INPUT statement or a map by positioning the cursor under the field and pressing the help function key (as defined with the SET KEY statement) or by entering the help character ("?" by default) into the field.

The syntax of this parameter is:

$$HE = operand1 \left[, \begin{Bmatrix} operand2 \\ = \end{Bmatrix} \right]_{...20}$$

Operand	Possible Structure				Possible Formats											Referencing Permitted	Dynamic Definition
Operand1	C	S			A											no	no
Operand2	C	S	A		A	N	P	I	F	B	D	T	L	C	G	O	no	no

Operand1 is the name of the helproutine or map to be invoked. The name may be a 1 to 8 character alphanumeric constant or user-defined variable. If a variable is used, it must have been previously defined. The name may contain an ampersand (&); at execution time, this character will be replaced by the current value of the Natural system variable *LANGUAGE. This feature allows the use of multi-lingual helproutines or maps.

After the helproutine name, you may specify 1 to 20 parameters (operand2) which may be passed to the helproutine. They may be specified as constants or as user-defined variables which contain the values of the parameters. If an "=" is specified as a parameter, the name of the field as defined in the map definition will be passed to the helproutine; in the case of a helproutine which is assigned to a map, "=" denotes the name of the map.

Note:
The operands must be separated either by the input delimiter character (as specified with the session parameter ID) or by a comma. A comma must not be used for this purpose, however, if the comma is defined as decimal character (with the session parameter DC).

If parameters are specified, the helproutine must begin with a DEFINE DATA PARAMETER statement which defines fields that correspond in format and length with the parameters.

If the parameter notation "=" is used to pass a field or map name, the corresponding parameter in the helproutine must be specified as A65.

The value of the field for which a helproutine is specified may be referenced within the helproutine. This is done by specifying a field in the DEFINE DATA PARAMETER statement which corresponds in format and length with the original field. In the block of fields defined within the DEFINE DATA PARAMETER statement, this field must always be defined behind the parameters, if present.

If the field for which a helproutine is specified is an array element, its indices may be referenced by the helproutine. To do so, you specify index parameters with format/length I2 at the end of the DEFINE DATA PARAMETER statement. You may specify up to three index parameters according to array dimensions.

Execution Of Helproutines

If a helproutine is requested - by entering a "?" in the field, or by pressing the help key (as defined with a SET KEY statement), or via a REINPUT USING HELP statement - all other data that may have been entered into fields are not assigned to the program variables until all help requests have been processed.

Note:
Only one help request per INPUT statement is possible; that is, if help is requested for more than one field (for example, by entering question marks in multiple fields), only the first help request will be executed.

Example:

```
/* MAIN PROGRAM
DEFINE DATA
1 #A(A20/1:3)
END-DEFINE
...
SET KEY PF1=HELP
...
INPUT #A (2) (HE='HELPA',=)
...
END
```

```
/* HELP-ROUTINE 'HELPA'
DEFINE DATA PARAMETER
1 #VARNAME  (A65)
1 #PARM1    (A20)
1 #VARINDEX (I2)
END-DEFINE
...
```

If a value is to be passed from a helproutine to an input field, the field must be defined as modifiable (AD=M).